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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,519	04/01/2004	Michael J. Ziegler	1928A1	1571

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PPG Industries, Inc.
Law - Intellectual Property
One PPG Place
Pittsburgh, PA 15272

EXAMINER

NILAND, PATRICK DENNIS

ART UNIT	PAPER NUMBER
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1714

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/815,519

Applicant(s)

ZIEGLER ET AL.

Examiner

Patrick D. Niland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-16 and 20-51 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,5-16 and 20-51 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/04, 12/05, 9/06.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

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1. Claims 1, 5-16, and 20-51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. It is unclear what is intended by "oligomer comprising" of the instant claims in view of "wherein the oligomer is substantially free of any ester linkages formed from the reaction of the polyol portion with a compound having more than one functional group." Section [0022] of the instant specification states that acrylic acid can be esterified onto the polyol. Acrylic acid has "more than one functional group" and will result in an ester linkage. Thus, the question is raised as to whether the claims are directed to the reaction product of a and b as would be expected from "oligomer comprising" or to the mixture of a and b, as would be literally required by the last two lines of claim 1, at least in numerous disclosed circumstances such as that of section [0022]. It is unclear what is required of "modified" for analogous reasons. Specifically, the drying oils have more than one functional group, e.g. the drying functionality and the acid functionality, which will give an ester group when reacted with the polyol. Thus, it is unclear if modified is intended to be the disclosed reaction products or the mixture of the components so as to meet the limitations of the last two lines of claim 1.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 5-12, 14-16, 20-27, and 29-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/47617 Van Den Berg et al..

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Van Den Berg et al. discloses oligomers falling within the scope of the instant claims at the abstract; page 1, lines 5-26; page 2, lines 1-29, particularly 26 of which “if so desired” indicates that this component, which appears to be excluded by the last two lines of the instant claim 1, is not required; page 3, lines 1-29, particularly 10-29 which discloses the instantly claimed fatty acids, polyols, and “modification”; page 4, lines 1-23, particularly 12-23; page 5, lines 1-10; page 7, lines 12-29; page 8, lines 1-29, particularly 21-29; page 9, lines 1-26; page 12, lines 7-29; page 13, lines 1-27; page 14, lines 1-28, particularly 8-22; page 15, lines 1-29, particularly 21-26, which includes coating of wood; and the remainder of the document. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to make the instantly claimed oligomer from the disclosure of the reference because it is encompassed by the disclosure of Van Den Berg and would have been expected to give a coating having the properties disclosed by Van Den Berg. Van Den Berg discloses using these in coating substrates including wood which reads on the instantly claimed methods, and curing them oxidatively or with photoinitiators. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the composition molecular weights and polydispersities of the instant claims 32-35 because the molecular weights of the moieties disclosed above are expected to have molecular weights and polydispersities within the broad ranges of the instant claims in order to function as a coating agent and such polydispersities are typical for such oligomeric species. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use no solvent because the oil based compositions of the reference are typically of low enough viscosity to be used without organic solvent and “generally” with regard to solvent usage indicates that solvent is not always required. It would have been obvious to one of ordinary skill

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in the art at the time of the instant invention to use the woods of the instant claim 46 in the form of the instant claim 47 because these are typical woods available in North America which are typically stained with oil based coatings, particularly when they are in the form of the instant claim 47 as is well known. It is not seen that some degree of scratch resistance would not be imparted by the highly crosslinked coatings of the reference in accordance with the instant claim 48.

4. Claims 13 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art does not teach the limitations of these claims nor provide rationale to use these compounds in the compositions of the prior art considered.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Patrick D. Niland', is positioned above the printed name.

Patrick D. Niland
Primary Examiner
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